

In Memoriam	413-414	Robert Leslie Nichols 1904-1995
Book Reviews	415-417	<i>The Periglaciation of Great Britain.</i> By Colin K. Ballantyne and Charles Harris; <i>The Ice Age World.</i> By Bjørn Andersen and Harold W. Borns; <i>To the Sixth Continent: The Second German South Polar Expedition.</i> By Wilhelm Filchner, translated by William Barr.
Contents and Index for Vol. 27	418-424	

Subject and Author Index for Volume 27, 1995

- Abadie, W. See Sveinbjörnsson, B., et al.
Abies lasiocarpa, 217-225
 Active layer: Changes, 323-336; Thaw rate, 72-80
 Alaska: Active layer, 72-80; Bering Glacier, 81-88; Soil, 29-37
 Albedo: 389-399
 Algae: Snow, 389-399
 Allard, M., Wang, B., and Pilon, J. A. (Recent cooling along the southern shore of Hudson Strait, Quebec, Canada, documented from permafrost temperature measurements), 157-166
 Allen, E. B. See Helm, D. J. and Allen, E. B.
Alnus sinuata, 246-257
 Alpine: Ground beetles, 371-379; Lichens, 400-406; Vegetation, 130-136
 Alps: Basal ice facies, 301-310; Glacier retreat zone, 371-379
 Andrews, J. T. See Williams, K. M., et al.
 Aniya, M. (Holocene glacial chronology in Patagonia: Tyndall and Upsala Glaciers), 311-322
 Arctic: Driftwood, 180-186; Herbivory, 44-53; Ice divides, 264-270; Polar semidesert, 172-179; Snow cover, 38-43; Soil development, 54-71; Soil organisms, 364-370; Soil temperature, 364-370; Vegetation, 38-43; Water relations, 137-145
Aspicilia candida, 290-297
 Atmospheric circulation, 226-233
 Autosuccession, 172-179
 Bacteria: Snow, 389-399
 Baker, W. L. See Weisberg, P. J. and Baker, W. L.
 Bale, J. S. See Coulson, S. J., et al.
 Basal ice, 301-310
 Beartooth Plateau: Lichens, 400-406
 Bering Glacier, Alaska, 81-88
Betula pubescens, 380-388
 Biomass: Paramo grassland, 1-12, 13-18
 Block, W. See Coulson, S. J., et al.
 Bock, J. H., Jolls, C. L., and Lewis, A. C. (The effects of grazing on alpine vegetation: a comparison of the Central Caucasus, Republic of Georgia, with the Colorado Rocky Mountains, U.S.A.), 130-136
 Bohland, L. See Romme, W. H., et al.
 Book Reviews
Anthropology of the North Pacific Rim. Ed. W. W. Fitzhugh and V. Chaussonnet. M. D. Turner, 202
Arctic Adaptations: Native Whalers and Reindeer Herders of Northern Eurasia. I. Krupnik. D. L. Schindler, 199
Central Appalachian Periglacial Geomorphology: A Field Excursion Guidebook. G. Michael Clark. J. Boardman, 298-299
Ecology of a Polar Oasis. Ed. J. Svoboda and B. Freedman. D. A. Walker, 99
Geomorphology and Sedimentology of Lakes and Reservoirs. Ed. J. McManus and R. W. Duck. J. T. Andrews, 203
Glacier Mass Balance Bulletin. Bulletin No. 3 (1992-1993). W. Haeberli et al. M. F. Meier, 299-300
Labrador Winter: The Ethnographic Journals of William Duncan Strong, 1927-1928. Ed. E. B. Leacock and N. A. Rothschild. V. Sloan, 200-201
Mass Balance of Axel Heiberg Island Glaciers 1960-1991: A Reassessment and Discussion. J. G. Cogley et al. M. F. Meier, 299
Quartäre Vegetationsgeschichte Europas: Methoden und Ergebnisse. G. Lang. V. Markgraf, 203
Quaternary Insects and Their Environments. S. A. Elias. R. F. Miller, 99-100
Skua and Penguin: Predator and Prey. E. Young. L. Spear, 100-101
Snow and Glacier Hydrology. Ed. G. J. Young. N. Caine, 202-203
Southern Ocean Ecology: The BIOMASS Perspective. Ed. S. Z. El-Sayed. E. E. Hofmann, 101-102
The Ice Age World. B. Andersen and H. W. Borns. S. A. Elias, 415-416
The Periglaciation of Great Britain. C. K. Ballantyne. R. Miller, 415
To the Sixth Continent: The Second German South Polar Expedition. W. Filchner. P. N. Cronenwett, 416-417
Volcanoes of the World: A Regional Directory, Gazetteer, and Chronology of Volcanism during the Last 10,000 Years. T. Simkin, L. Siebert et al. D. K. Yamaguchi, 298
 Bull Lake Glaciation, 89-98
 Burned grassland, 1-12, 13-18
 Butler, A. See Sveinbjörnsson, B., et al.

- Calkin, P. E. See Wiles, G. C., et al.
 Canonical correspondence analysis, 38–43
 Canopy transmission, 380–388
 Carabidae, 371–379
 Carbon, 29–37
Carex stans, 137–145
 Caruso, T. See Romme, W. H., et al.
 Castillo, M. X. M. See Hofstede, R. G. M., et al.
 Caucasus: Alpine vegetation, 130–136
 Chinn, T. J. H. (Glacier fluctuations in the southern Alps on New Zealand determined from snowline elevations), 187–198
 Chironomidae, 258–263
 Climate change, 72–80, 116–129, 207–216, 157–166, 167–171, 217–225, 234–245, 323–336
 Coleoptera, 371–379
 Colombia: Grassland, 1–12, 13–18
 Colonization, 107–115
 Colorado: Extreme precipitation event, 19–28
 Correlation analysis, 38–43
 Coulson, S. J., Hodkinson, I. D., Strathdee, A. T., Block, W., Webb, N. R., Bale, J. S., and Worland, M. R. (Thermal environments of arctic soil organisms during winter), 364–370
 Courtin, G. M. See Nosko, P. and Courtin, G. M.
 Dating, 290–297
 Davis, J. See Sveinbjörnsson, B., et al.
 Dendrochronology: Driftwood, 180–186
 Denmark Strait, 352–363
 Diatoms, 352–363
 Dinoflagellates, 352–363
 Dowdeswell, J. A., Glazovsky, A. F., and Macheret, Y. Y. (Ice divides and drainage basins on the ice caps of Franz Josef Land, Russian High Arctic, defined from Landsat, KFA-1000, and ERS-1 SAR satellite imagery), 264–270
 Driftwood, 180–186
 Duval, B. See Thomas, W. H. and Duval, B.
 Ecological impact, 19–28
 Ecological niche, 371–379
 Ecology: Chironomidae, 258–263; Ground beetles, 371–379; Lichens, 400–406; Postfire germination, 407–412; *Phippsia*, 172–179; Vegetation succession, 246–257
 Eggertsson, O. and Laeyendecker, D. (A dendrochronological study of the origin of driftwood in Frobisher Bay, Baffin Island, N.W.T., Canada), 180–186
 Elastic model, 283–289
 Everett, Kaye R., In Memoriam, 105–106
 Eversman, S. (Lichens of alpine meadows on the Beartooth Plateau, Montana and Wyoming, U.S.A.), 400–406
 Fire: Postfire vegetation, 407–412; Recovery from, 323–336, 407–412
 Fleisher, P. J. See Muller, E. H. and Fleisher, P. J.
 Foraminifera, 352–363
 Forest expansion, 207–216
 Forest-tundra ecotone: Alpine, 116–129; Arctic, 323–336
 Fountain, A. G. See McCabe, G. J., Jr. and Fountain, A. G.
 Franz Josef Land, 264–270
 French, H. M. See Wang, B. and French, H. M.
 Frenot, Y., Van Vliet-Lanoë, B., and Gloaguen, J.-C. (Particle translocation and initial soil development on a glacier foreland, Kerguelen Islands, Subantarctic), 107–115
 Frost heave, 337–344
 Geobotanical dating, 290–297
 Geomorphology: Pronival ramparts, 271–282
 Gereben, B.-A. (Co-occurrence and microhabitat distribution of six *Nebria* species (Coleoptera: Carabidae) in an alpine glacier retreat zone in the Alps, Austria), 371–379
 Glacial deposits, 89–98
 Glacial landforms, 311–322
 Glacier: Chronology, 311–322; Fluctuations, 187–198, 234–245; Foreland, 107–115; Hydrology, 301–310; Ice, 345–351; Mass balance, 187–198, 226–233; Retreat, 371–379; Surging history, 81–88
 Glaciology: Iceberg-calving glaciers, 234–245; Mass balance, 187–198, 226–233; Surging history, 81–88
 Glazovsky, A. F. See Dowdeswell, J. A., et al.
 Gloaguen, J.-C. See Frenot, Y., Van Vliet-Lanoë, B., and Gloaguen, J.-C.
 Grassland: Biomass, 1–12, 13–18
 Grazing, 1–12, 13–18, 44–53, 130–136
 Greenland, D. (Extreme precipitation during 1921 in the area of the Niwot Ridge Long-Term Ecological Research Site, Front Range, Colorado, U.S.A.), 19–28
 Greenland: Continental Shelf paleoceanography, 352–363
 Grulke, N. E. (Distribution of *Phippsia algida* and aut succession in the polar semidesert, Canadian High Arctic), 172–179
 Hall, R. D. and Shroba, R. R. (Soil evidence for a glaciation intermediate between the Bull Lake and Pinedale glaciation at Fremont Lake, Wind River Range, Wyoming, U.S.A.) 89–98
 Hamilton, S. J. See Whalley, W. B., et al.
 Harmsen, R. See Mulder, C. P. H. and Harmsen, R.
 Helm, D. J. and Allen, E. B. (Vegetation chronosequence near Exit Glacier, Kenai Fjords National Park, Alaska, U.S.A.), 246–257
 Herbivory, 44–53
 Herbs: Germination, 407–412
 Hinkel, K. M. and Nicholas, J. R. J. (Active layer thaw rate at a boreal forest site in central Alaska, U.S.A.), 72–80
 Hodkinson, I. D. See Coulson, S. J., et al.
 Hofstede, R. G. M. and Rossenaar, A. J. G. A. (Biomass of grazed, burned, and undisturbed páramo grasslands, Colombia. II. Root mass and aboveground:belowground ratio), 13–18
 Hofstede, R. G. M., Castillo, M. X. M., and Osorio, C. M. R. (Biomass of grazed, burned, and undisturbed Páramo grasslands, Colombia. I. Aboveground vegetation), 1–2
 Holland, S. See Rouse, W. R., et al.
 Holmgren, B. See Ovsted, M. and Holmgren, B.
 Holocene: Glacial chronology, 311–322; History, 81–88
 Hubbard, B. and Sharp, M. (Basal ice facies and their formation in the western Alps), 301–310
 Ice: Divides, 264–270; Facies, 301–310; Isotopic composition, 301–310; Surface topography, 264–270; Transport, 283–289
 Ice-made ramparts, 283–289
 Ice-rich permafrost, 323–336
 Iceland: Rock glaciers, 345–351
 In Memoriam: Kaye Ronald Everett, 1934–1994, 105–106; Robert Leslie Nichols, 1904–1995, 413–414
 Isotopes: Ice, 301–310
 Japan: Lake ice, 283–289
 Jolls, C. L. See Bock, J. H., et al.
 Kelly, P. E. and King, R. H. (Factors controlling soil development on a sequence of raised beaches, Truelove Lowland, Devon Island, N.W.T., Canada), 54–71
 Kenai Fjords, 234–245, 246–257
 King, R. H. See Kelly, P. E. and King, R. H.
 Krummholz growth, 116–129

- Laberge, M. J. and Payette, S. (Long-term monitoring of permafrost change in a palsa peatland in Northern Quebec, Canada: 1983–1993), 167–171
- Laeyendecker, D. *See* Eggertsson, O. and Laeyendecker, D.
- Lake ice profile, 283–289
- Lake sediments, 258–263
- Lassen Volcanic National Park, 207–216
- Lewis, A. C. *See* Bock, J. H., et al.
- Lichen growth curve, 290–297
- Lichens, 400–406
- Lithosequence, 54–71
- Long-Term Ecological Research, 19–28
- MacDonald, G. M. *See* Walker, I. R. and MacDonald, G. M.
- Macheret, Y. Y. *See* Dowdeswell, J. A., et al.
- Mackay, J. R. (Active layer changes (1968 to 1993) following the forest-tundra fire near Inuvik, N.W.T., Canada), 323–336
- Martin, H. E. *See* Whalley, W. B., et al.
- Matthews, J. A. *See* Shakesby, R. A., et al.
- McCabe, G. J., Jr. and Fountain, A. G. (Relations between atmospheric circulation and mass balance of South Cascade Glacier, Washington, U.S.A.), 226–233
- McCarroll, D. *See* Shakesby, R. A., et al.
- McCarthy, D. P. and Smith, D. J. (Growth curves for calcium-tolerant lichens in the Canadian Rocky Mountains), 290–297
- Meadow invasion, 217–225
- Messier, F. *See* Schaefer, J. A. and Messier, F.
- Methane emissions, 146–156
- Midges, 258–263
- Moore, T. R. *See* Rouse, W. R., et al.
- Mountain: Soil, 29–37
- Mudie, P. J. *See* Williams, K. M., et al.
- Mulder, C. P. H. and Harmsen, R. (The effect of muskox herbivory on growth and reproduction in an arctic legume), 44–53
- Muller, E. H. and Fleisher, P. J. (Surging history and potential for renewed retreat: Bering Glacier, Alaska, U.S.A.), 81–88
- Muskox, 44–53
- Nagasawa, T. *See* Sasaki, T. and Nagasawa, T.
- Nebria, 371–379
- Neoglacial advances, 311–322
- New Zealand: Glacier fluctuations, 187–198; Snowline, 187–198
- Nicholas, J. R. J. *See* Hinkel, K. M. and J. R. J. Nicholas
- Nichols, Robert Leslie, In Memoriam, 413–414
- Nitrogen: Mineralization, 29–37
- Norway: Pronival ramparts, 271–282
- Nosko, P. and Courtin, G. M. (The water relations of *Carex stans* in wet sedge-moss tundra at a high arctic oasis, Devon Island, N.W.T., Canada), 137–145
- Olympic National Park, 217–225
- Opal, 352–363
- Ovhed, M. and Holmgren, B. (Spectral quality and absorption of solar radiation in a mountain birch forest, Abisko, Sweden), 380–388
- Paleoceanography, 352–363
- Paleolimnology, 258–263
- Paleosols, 89–98
- Palmer, C. F. *See* Whalley, W. B., et al.
- Palsa, 167–171
- Páramo, 1–12, 13–18
- Particle translocation, 107–115
- Patagonia: Glacial chronology, 311–322
- Patterned ground, 337–344
- Payette, S. *See* Laberge, M. J. and Payette, S.
- Pedogenesis, 54–71
- Periglacial process, 337–344
- Permafrost: Active layer thaw rate, 72–80; Active layer changes, 323–336; Change in palsa peatland, 167–171; Frost heave, 337–344; Temperature, 157–166
- Persichetty, C. *See* Romme, W. H., et al.
- Phippsia algida*, 172–179
- Picea sitchensis*, 246–257
- Pilon, J. A. *See* Allard, M., et al.
- Pinedale Glaciation, 89–98
- Plant adaptations, 137–145
- Plant-climate relations, 146–156
- Populus balsamifera*, 246–257
- Post, A. *See* Wiles, G. C., et al.
- Precipitation: Extreme event, 19–28
- Pronival ramparts, 271–282
- Protalus ramparts, 271–282
- Quaternary glaciation, Wyoming, 89–98
- Quaternary paleoceanography, 352–363
- Radiation: Solar, 380–388; Ultraviolet, 389–399
- Raised beaches: Soil sequence, 54–71
- Rock glaciers, 345–351
- Rocky Mountains: Alpine vegetation, 130–136; Forest-tundra ecotone, 116–129; Lichen growth curve, 290–297
- Romme, W. H., Bohland, L. Persichetty, C., and Caruso, T. (Germination ecology of some common forest herbs in Yellowstone National Park, Wyoming, U.S.A.), 407–412
- Rossenaar, A. J. G. A. *See* Hofstede, R. G. M. and Rossenaar, A. J. G. A.
- Rouse, W. R., Holland, S., and Moore, T. R. (Variability in methane emissions from wetlands at northern treeline near Churchill, Manitoba, Canada), 146–156
- Russian High Arctic: Ice divides, 264–270
- Sasaki, T. and Nagasawa, T. (Shoreward movement of grounded lake ice and sediment transport: an application of a two-dimensional elastic model), 283–289
- Satellite imagery, 264–270
- Schaefer, J. A. and Messier, F. (Scale-dependent correlations of arctic vegetation and snow cover), 38–43
- Schreiner, E. G. *See* Woodward, A., et al.
- Sediment: Properties, 352–363; Transport, 283–289
- Sedimentology, 301–310
- Shakesby, R. A., Matthews, J. A., and McCarroll, D. (Pronival ["protalus"] ramparts in the Romsdalsalpane, southern Norway: forms, terms, subnival processes, and alternative mechanisms of formation), 271–282
- Sharp, M. *See* Hubbard, B. and Sharp, M.
- Shroba, R. R. *See* Hall, R. D. and Shroba, R. R.
- Sierra Nevada, 389–399
- Silsbee, D. G. *See* Woodward, A., et al.
- Sliding velocity, 345–351
- Smith, D. J. *See* McCarthy, D. P. and Smith, D. J.
- Snow: Albedo, 389–399; Algae, 389–399; Bacteria, 389–399
- Snow cover: Arctic, 38–43
- Snowbeds, 271–282
- Snowfall: Extreme event, 19–28
- Snowline, 187–198
- Soil: Carbon, 29–37; Development, Arctic, 54–71; Nitrogen, 29–37; Paleosols, Wyoming, 89–98; Pedogenesis, 107–115; Properties, 54–71; Temperature, 72–80, 364–370
- Solar radiation: Spectral quality, 380–388
- Spectral absorption, 380–388
- Spitsbergen: Soil temperature, 364–370
- Strathdee, A. T. *See* Coulson, S. J., et al.
- Subalpine: Germination, 407–412; Forest expansion, 207–216; Meadow, 217–225
- Subantarctic: Pedogenesis, 107–115
- Subarctic: Permafrost, 157–166, 167–171; Wetlands, 146–156
- Subnival, 271–282

- Sveinbjörnsson, B., Davis, J., Abadie, W., and Butler, A. (Soil carbon and nitrogen mineralization at different elevations in the Chugach Mountains of south-central Alaska, U.S.A.), 29–37
- Taylor, A. H. (Forest expansion and climate change in the mountain hemlock [*Tsuga mertensiana*] zone, Lassen Volcanic National Park, California, U.S.A.), 207–216
- Temperature measurements: Subarctic, 157–166
- Temperature: Arctic soils, 364–370
- Thaw rate, 72–80
- Thomas, W. H. and Duval, B. (Sierra Nevada, California, U.S.A., snow algae: snow albedo changes, algal-bacterial interrelationships, and ultraviolet radiation effects), 389–399
- Tibet Plateau, 337–344
- Tree establishment, 217–225
- Tree population dynamics, 116–129
- Tree regeneration, 207–216
- Treeline, 207–216, 217–225, 258–263; Wetlands, 146–156
- Tsuga mertensiana*, 207–216, 217–225, 246–257
- Tundra: Snow cover, 38–43; Vegetation, 38–43; Water relations, 137–145
- Van Vliet-Lanoë, B. *See* Frenot, Y. Van Vliet-Lanoë, B. and Gloaguen, J.-C.
- Vegetation cover: Arctic, 38–43
- Vegetation: Alpine, 130–136; Chronosequence, 246–257; Effect of grazing, 44–53; Recovery, 323–336; Succession, 246–257
- Walker, I. R. and MacDonald, G. M. (Distributions of Chironomidae [Insecta: Diptera] and other freshwater midges with respect to treeline, Northwest Territories, Canada), 258–263
- Wang, B. and French, H. M. (Frost heave and regolith characteristics, Tibet Plateau, China), 337–344
- Wang, B. *See* Allard, M., et al.
- Webb, N. R. *See* Coulson, S. J., et al.
- Weiner, N. J. *See* Williams, K. M., et al.
- Weisberg, P. J. and Baker, W. L. (Spatial variation in tree seedling and krummholz growth in the forest-tundra ecotone of Rocky Mountain National Park, Colorado, U.S.A.), 116–129
- Wetlands: Methane emissions, 146–156
- Whalley, W. B., Palmer, C. F., Hamilton, S. J., and Martin, H. E. (An assessment of rock glacier sliding using seventeen years of velocity data: Nautárdalur Rock Glacier, north Iceland), 345–351
- Wiles, G. C., Calkin, P. E., and Post, A. (Glacier fluctuations in the Kenai Fjords, Alaska, U.S.A.: an evaluation of controls on iceberg-calving glaciers), 234–245
- Williams, K. M., Andrews, J. T., Weiner, N. J., and Mudie, P. J. (Late Quaternary Paleocyanography of the mid- to outer Continental Shelf, east Greenland), 352–363
- Woodward, A., Schreiner, E. G., and Silsbee, D. G. (Climate, geography, and tree establishment in subalpine meadows of the Olympic Mountains, Washington, U.S.A.), 217–225
- Worland, M. R. *See* Coulson, S. J., et al.
- Xanthoria elegans*, 290–297
- Yellowstone National Park: Germination ecology, 407–412

